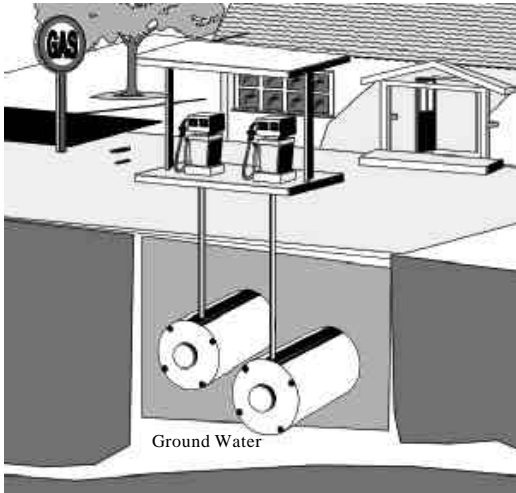


What are Underground Storage Tanks?

Underground storage tanks (known as USTs) are big containers placed underground to hold large quantities of liquids or gases. USTs also have piping and a pump station to move the tank contents to where they are used. About 95% of all USTs store petroleum products like gasoline or oil. Tanks may hold industrial chemicals, pesticides, or even food products.

IDEM closely regulates underground storage tanks, because leaking tanks can easily contaminate ground water. A spill of only three gallons of gasoline can spoil drinking water for a small town. It is important to protect ground water, because about 60% of Hoosiers get drinking water from ground water supplies.



Tanks usually contain greater than 1,000 gallons of product. There are about 6,400 facilities registered with IDEM operating 17,000 underground storage tanks. The US Environmental Protection Agency estimates that as many as 25% of USTs have leaked.

Underground Tank Locations and Contents

For safety, tanks containing petroleum products and other substances are placed underground to lessen the risk of explosion. Unfortunately, this placement makes it difficult to detect leaks that can enter ground water supplies. Here are the most common places to find USTs.

Gas Stations: This is the most common place to find tanks. Most USTs at gas stations contain the varying grades of gasoline. Many gasoline stations also have diesel fuel stored in USTs. However, fewer than 10% of tanks contain diesel fuel.

Dry Cleaners: Most dry cleaning facilities use hazardous chemicals to clean clothes. The most commonly used chemical,

perchloroethylene, is often stored in USTs.

Service Stations: Automotive service stations or oil change businesses frequently collect used oil in above or below ground tanks before proper disposal or recycling.

Airports and Truck Fleet Refueling Facilities: Most airports and truck fleet refueling facilities have USTs that hold jet fuel, hydraulic fuel, gasoline or diesel fuel.

Homes: Before natural gas was widely available, many homes and other buildings burned oil to produce heat. Heating oil was stored in tanks usually located in basements above the floor, or buried in the yard. Some of these tanks are still in use, others remain in the ground unused. These tanks are not regulated by IDEM, but pose a risk to water supplies if they leak.

Why Have Some Tanks Leaked?

Previously, most tanks were made out of unprotected steel, and would rust and leak after about 10 years (less time under certain conditions). Many tanks and connected piping exposed to ground water have rusted through, allowing the contents to seep out. Since 1998, tank owners and operators are required to use tanks lined with materials that do not rust to help prevent leaks.

How Might Tank Leaks Affect You?

- Vapors in homes or workplaces;
- Contaminate drinking water;
- Contaminate soil and ground water;
- Contaminate recreational water bodies;
- May decrease property values.

Tank Leaks and Your Health

The health effects from leaking USTs vary depending on the chemicals in the tank, the duration and size of the leak, specifics about the surrounding environment, duration of human contact to the chemicals, whether the contact was made to the skin, breathed in, or swallowed, and other factors.

Petroleum products such as gasoline, kerosene, diesel, and heating oil are made of many chemicals that have the potential to cause

health problems. The health effects can range from skin and respiratory irritation, to dizziness and headaches, to cancer.

For more information about health effects:

- Find out the contents of the leaking tank.
- Ask your doctor for more information.
- Look online at: www.atsdr.cdc.gov/toxfaq.html.

What is IDEM Doing About Leaking Tanks?

IDEM takes a dual approach to this problem, focusing on prevention of future problems and cleaning up contamination from leaks that have occurred.

Preventing Future Problems: All operating tanks must meet current standards for rust protection, leak detection, spill and overfill prevention or be closed. New tanks must meet strict design and operating standards. IDEM must be notified when new tanks are installed. IDEM inspects new and existing tank systems to ensure compliance with relevant laws.

Cleaning Up Existing Contamination: When the contents of a tank are detected in the ground, or in ground water or surface water, this contamination must be cleaned up immediately. Tank owners and operators must report suspected spills to IDEM within **24 hours** and stop the leak. If tank contents pool and form underground puddles, these puddles (called free product) must be cleaned up immediately to prevent the contamination from spreading and to prevent contact with the contamination. The tank owners must report to IDEM to explain how the free product was removed or cleaned within **20 days** of the spill, and clean contaminated water and vapors.

Within **45 days** of the spill, a report defining the exact location of contamination. A plan for cleaning up any remaining contamination must be submitted to IDEM in 45 more days. Cleanups usually begin about 30 days after IDEM approves the cleanup plan.

How Many Areas in Indiana Contain Leaking Tanks?

Since 1989, approximately 2500 sites have been cleaned up where USTs leaked. The Leaking Underground Storage Tank Section is working to address about 4000 more sites contaminated by leaking tanks. With so many spills to address, sites are prioritized to ensure that the spills with the greatest chance of impacting people are cleaned up first. Spills are placed into one of three categories: high, medium, or low priority.

High Priority Sites (about 10% of known sites) are sites where:

- Vapors are in buildings with people;
- Drinking water may be impacted;
- Tank contents are present in pools;
- Utility conduits (such as sewer lines) are affected; and
- Environmentally sensitive areas are impacted.

Medium Priority Sites (about 45% of known sites) have;

- No high priority conditions present; and
- In addition to soil, possible ground water contamination.

Low Priority Sites (about 45% of known sites) have:

- Only soil impacted by the tank contents.

What Can You Do?

If you smell gas or any chemical odor in your home, call your local Fire Department, open windows and leave the house.

DO NOT use any item that may produce a spark or flame.

If there is an oil sheen or petroleum smell or taste in your drinking water, or **if you see or suspect a spill**, call IDEM's 24-hour Environmental Emergency Hotline at (888) 233-7745, or (317) 233-7745.

If you want to have your drinking water tested for possible petroleum contamination, call your County Health Department. They can tell you how to take samples and may help you get free or low-cost water testing from the State Department of Health.

How Can You Contact Us?

To learn more about how IDEM prevents or cleans up leaking tanks, or if you have other questions about underground tanks, contact IDEM's Leaking Underground Storage Tank Section at (317) 232-8900. Or reach us toll free at (800) 451-6027 and ask for extension 2-8900.

You can also visit our web site at:

<http://www.state.in.us/idem/olq/programs/lust>.

Is there information you need that is missing from this brochure? Call us and let us know, so that we can improve the next one. (317) 232-8900 or email to mwaldo@dem.in.state.us.



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Address Service Requested

LEAKING UNDERGROUND STORAGE



TANKS

YOU and YOUR FAMILY

What you need to know.

Provided to you by the Leaking Underground Storage Tank
Section of the Office of Land Quality.

